



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,810	09/29/2003	Andrew John Farnsworth	1578.619(PUS-1155)	2209
44208	7590	02/08/2006	EXAMINER	
DOCKET CLERK			VU, MICHAEL T	
PO BOX 12608			ART UNIT	PAPER NUMBER
DALLAS, TX 75225			2683	

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/673,810	Applicant(s) FARNSWORTH, ANDREW JOHN	
	Examiner Michael Vu	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-9,11 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-9,11 and 13-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 6 and 13 are objected to because of the following informalities: as being dependent on cancelled claims 3, 5, 10, 12.

Response to Arguments

Applicant's arguments filed November 25, 2005 have been fully considered but they are not persuasive.

Applicant argues or alleges the following claims 1, and 8. The Wu do not teach or suggest the analyzing where the message is "one of the following: a Cell Update Confirm message or a URA Update Confirm message or a RRC Connection setup message"; and in response to the message, clearing from the device any record of a cell identifier.

In response to applicant's arguments as stated above, the examiner respectfully disagrees with Applicant on this point. Wu teaches the method the Cell Update procedure is performed when a UE moves into another cell region, and is used to update the location of the UE. A Cell Update Confirm message is then sent by the RRC of the TRNS to the corresponding peer entity RRC on the UE, for completing the Cell Update procedure (see Fig. 13, [0052-0055, 0060]).

Furthermore, In response to applicant's arguments as stated that Kuo fails to show clearing from the device of any record of a cell identifier. However, the examiner respectfully disagrees with Applicant on this point. Therefore, examiner interpreted that

Art Unit: 2683

Sarkkinen teaches updating and cleaning or clearing or deleting of the record can be made based on User Equipments' identification (see [0041-0042, 0077]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Riley. (see Claim Rejections below).

Specification

1. The following title is suggested: "be more specific with the title that related to the invention".
2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37

CFR 1.97 and 1.98.

- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

(Applicant must show all requirement headings)

" Need DETAILED DESCRIPTION OF THE INVENTION"

Drawings

Need "Prior Art" label on Figures 1 to 3.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo (US 2004/0203971) in view of Wu (2003/0210676), and further view of Sarkkinen (US 2003/0119533). [Hereafter, Kuo + Wu + Sarkkinen].

Regarding **claim 1**, a method of processing messages received by a device from a network (Fig. #1, between UE and UTRAN, [0008] sending or responding message), the method comprising: receiving a message that indicates that the device should be in a dedicated channel state (when receiving message the UE 40 is the dedicated channel (CELL_DCH) state 82, [0010]), and in response to the message, but Kou **fails to teach** wherein the message is a message other than a reconfiguration message. However, Wu teaches the cell update confirm between UE and UTRAN, which is not a reconfiguration message, and including the Downlink counter synchronization information in the RRC message (Radio Bearer Setup, Radio Bearer Release, Transport Channel Reconfiguration, and Cell Update, and URA update (Fig. #6, [0046])).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that wherein the message is a message other than a reconfiguration message to avoid such loss and increasing the bandwidth utilization efficiency in between the UTRAN and UE.

Art Unit: 2683

But also Kuo **fails to teach** to clearing from the device any record of a cell identifier.

However, Sarkkinen teaches the cleaning of the database from the Multicast Database, which is update message and check the identification of the UE from the Mu UE-id field and delete records from old database. (Fig. #2, and [0077].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that wherein the message is a message other than a reconfiguration message clearing from the device any record of a cell identifier to prevent or avoid the duplicate, overlapping or redundancy of receiving message between UE and UTRAN.

Regarding **claim 2**, Kuo teaches in claim 1, he further teaches wherein the dedicated channel is a Cell_DCH channel ([0007]).

Regarding **claim 3**, Kuo teaches in claim 1, he further teaches wherein the reconfiguration messages consist of the following: Radio Bearer Setup message, Radio Bearer Reconfiguration message, Radio Bearer Release message, Transport Channel Reconfiguration message or Physical Channel Reconfiguration message ([0008]).

Regarding **claim 4**, Kou teaches in claim 1, but **fails to teach** wherein the cell identifier is a Cell Radio Network Temporary Identifier. However, Wu teaches in telecommunication systems such as 3G or UTMS systems enter into such a state of which the mobile station needs a Cell Radio Network Temporary Identifier (C_RNTI) used as UE to identifiers within an UTRAN in signaling messages between UE and UTRAN [0060].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that wherein the cell identifier is a Cell Radio Network Temporary Identifier to check if a state need to change for a mobile station which reduces signaling between UE and UTRAN.

Regarding **claim 5**, Kuo teaches in claim 1, but **fails to teach** wherein the message is one of the following: a Cell Update Confirm message or a URA Update Confirm message or a RRC Connection setup message. However, Wu teaches the cell update confirm between UE and UTRAN, and including the Downlink counter synchronization information in the RRC message (Radio Bearer Setup, Radio Bearer Release, Transport Channel Reconfiguration, and Cell Update procedure, Fig. #9, [0029]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that a Cell Update Confirm message or a URA Update Confirm message or a RRC Connection setup message to prevent and ensure of the routing packet / avoiding the loss of packet or data.

Regarding **claim 6**, Kou teaches a method according to any preceding claim wherein when the message is a message that indicates that the device should move into a dedicated channel state (the Radio Link Control layer has confirmed the successful transmission of the response message then moved into a decated channel state [0010]), but **fails to teach** to the method further comprises clearing from the device any record of a cell identifier before moving to the dedicated channel state. However, Sarkkinen teaches the cleaning of the database, the new RNC requests the old RNC to delete corresponding records form old RNC's database, based on the

Art Unit: 2683

multicast subscriber update message to the old RNC which deletes the invalid records from the database (Fig. #2, delete from Old RNC subscriber related information from the database, and (deletion will base on the value of Mu UE-id field [0077]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that the method further comprises clearing from the device any record of a cell identifier before moving to the dedicated channel state to prevent or avoid the duplicate or overlapping or redundancy of receiving message from different UE.

Regarding **claim 7**, Kou teaches in claim 1, but **fails to teach** wherein the cell identifier is a Cell Radio Network Temporary Identifier. However, Wu teaches in telecommunication systems such as 3G or UTMS systems enter into such a state of which the mobile station needs a Cell Radio Network Temporary Identifier (C_RNTI) used as UE to identifiers within an UTRAN in signaling messages between UE and UTRAN [0060].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that wherein the cell identifier is a Cell Radio Network Temporary Identifier to check if a state need to change for a mobile station which reduces signaling between UE and UTRAN.

Kou teaches in claim 1, but fails to teach to not storing in the device any record of the cell identifier included in the message. However, Sarkkinen teach the cleaning of database or delete corresponding records from old database based on the value of Mu UE—id field (Fig. #2, [0077]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that to not storing in the device any record of the cell identifier included in the message to check the identification from each UE to generate records.

Regarding **claim 8**, Kou teaches a method of processing messages received by a device from a network (Fig. #1, between UE and UTRAN, [0008] sending or responding message), the method comprising: receiving a message that indicates that the device should be in a dedicated channel state (when receiving message the UE 40 is the dedicated channel (CELL_DCH) state 82, [0010]), and in response to the message, but Kou **fails to teach** wherein the message is a message other than a reconfiguration message. However, Wu teaches the cell update confirm between UE and UTRAN, which is not a reconfiguration message, and including the Downlink counter synchronization information in the RRC message (Radio Bearer Setup, Radio Bearer Release, Transport Channel Reconfiguration, and Cell Update, and URA update (Fig. #6, [0046])).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that wherein the message is a message other than a reconfiguration message to avoid such loss and increasing the bandwidth utilization efficiency in between the UTRAN and UE.

But also Kuo **fails to teach** to clearing from the device any record of a cell identifier.

However, Sarkkinen teaches the cleaning of the database from the Multicast Database,

which is update message and check the identification of the UE from the Mu UE-id field and delete records from old database. (Fig. #2, and [0077]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that wherein the message is a message other than a reconfiguration message clearing from the device any record of a cell identifier to prevent or avoid the duplicate, overlapping or redundancy of receiving message between UE and UTRAN.

Regarding **claim 9**, Kuo teaches in claim 8, he further teaches apparatus according to claim 8 wherein the dedicated channel is a Cell_DCH channel ([0007]).

Regarding **claim 10**, Kuo teaches in claim 8, he further teaches apparatus according to claim 8 wherein the reconfiguration messages consist of the following: Radio Bearer Setup message, Radio Bearer Reconfiguration message, Radio Bearer Release message, Transport Channel Reconfiguration message or Physical Channel Reconfiguration message ([0008]).

Regarding **claim 11**, Kou teaches in claim 8, but **fails to teach** Apparatus according to claim 8 wherein the cell identifier is a Cell Radio Network Temporary Identifier. However, Wu teaches in telecommunication systems such as 3G or UTMS systems enter into such a state of which the mobile station needs a Cell Radio Network Temporary Identifier (C_RNTI) used as UE to identifiers within an UTRAN in signaling messages between UE and UTRAN [0060].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that wherein the cell identifier is a Cell

Radio Network Temporary Identifier to check if a state need to change for a mobile station which reduces signaling between UE and UTRAN.

Regarding **claim 12**, Kuo teaches in claim 8, but **fails to teach** Apparatus according to claim 8 wherein the message is one of the following: a Cell Update Confirm message, a URA Confirm Update message or a RRC Connection setup message. However, Wu teaches the cell update confirm between UE and UTRAN, and including the Downlink counter synchronization information in the RRC message (Radio Bearer Setup, Radio Bearer Release, Transport Channel Reconfiguration, and Cell Update procedure, Fig. #9, [0029]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that a Cell Update Confirm message or a URA Update Confirm message or a RRC Connection setup message to prevent and ensure of the routing packet / avoiding the loss of packet or data.

Regarding **claim 13**, Kou teaches of claim 8 to 12 wherein the apparatus is further arranged, on receipt of a message that indicates that the apparatus should move into a dedicated channel state (the Radio Link Control layer has confirmed the successful transmission of the response message then moved into a decated channel state [0010]), but **fails to teach** to clear from the apparatus any record of a cell identifier before moving to the dedicated channel state. However, Sarkkinen teaches the cleaning of the database, the new RNC requests the old RNC to delete corresponding records form old RNC's database, based on the multicast subscriber update message to the old RNC which deletes the invalid records from the database (Fig. #2, delete from

Old RNC subscriber related information from the database, and (deletion will base on the value of Mu UE-id field [0077]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that the method further comprises clearing from the device any record of a cell identifier before moving to the dedicated channel state to prevent or avoid the duplicate or overlapping or redundancy of receiving message from different UE.

Regarding **claim 14**, Kuo teaches in claim 8, wherein the apparatus is further arranged, on receipt of a message that includes a new cell identifier, not to store in the apparatus any record of the cell identifier included in the message, but **fails to teach** apparatus according to claim 8 wherein the apparatus is further arranged, on receipt of a message that includes a new cell identifier. However, Wu teaches in telecommunication systems such as 3G or UTMS systems enter into such a state of which the mobile station needs a Cell Radio Network Temporary Identifier (C_RNTI) used as UE to identifiers within an UTRAN in signaling messages between UE and UTRAN [0060].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that wherein the cell identifier is a Cell Radio Network Temporary Identifier to check if a state need to change for a mobile station which reduces signaling between UE and UTRAN.

Kou teaches in claim 8, but fails to teach to not to store in the apparatus any record of the cell identifier included in the message. However, Sarkkinen teach the

cleaning of database or delete corresponding records from old database based on the value of Mu UE—id field (Fig. #2, [0077]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that not to store in the apparatus any record of the cell identifier included in the message to check the identification from each UE to generate records.

Regarding **claim 15**, Kou teaches a mobile telecommunication device incorporating apparatus according to claim 8. (Fig. #1, between UE and UTRAN, [0008] sending or responding message).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. (US 2005/0009527)
2. (US 2003/0236085)
3. (US 2003/0171129)
4. (US 2003/0235212)
5. (US 2004/0203778)

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/673,810

Page 15

Art Unit: 2683

A handwritten signature in cursive script, appearing to read "Michael T. Vu".

Michael T. Vu

A handwritten signature in cursive script, appearing to read "William Trost".

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600